EXHIBIT #1:
Blue Origin Texas, LLC
DATE: June 13, 2017
FCC File Number: 0438-EX-CN-2017

Application for New Experimental Radio Station Authorization (FCC Form 442)

TYPE OF APPLICANT:
Blue Origin Texas, LLC is a limited liability company formed under the laws of the State of Texas.

QUESTION 6: STATEMENT OF RESEARCH PROJECT

(a) Blue Origin is an aerospace research and development company developing commercial space launch vehicle technology. Blue Origin conducts flight testing of these vehicles at its private test facility in Culberson County, Texas. This test facility is in the sparsely-populated desert of Western Texas, approximately 25 miles north of the town of Van Horn.

(b) The FCC license applies to telemetry between ground stations and aerial vehicles that are being built by Blue Origin. A telemetry and command radio link is required to send instructions to and receive data from the aerial vehicles in real time while they are on the ground and in flight undergoing testing. This application is for the consolidation of two previous licenses covering four total frequencies to support two vehicles that separate in flight.

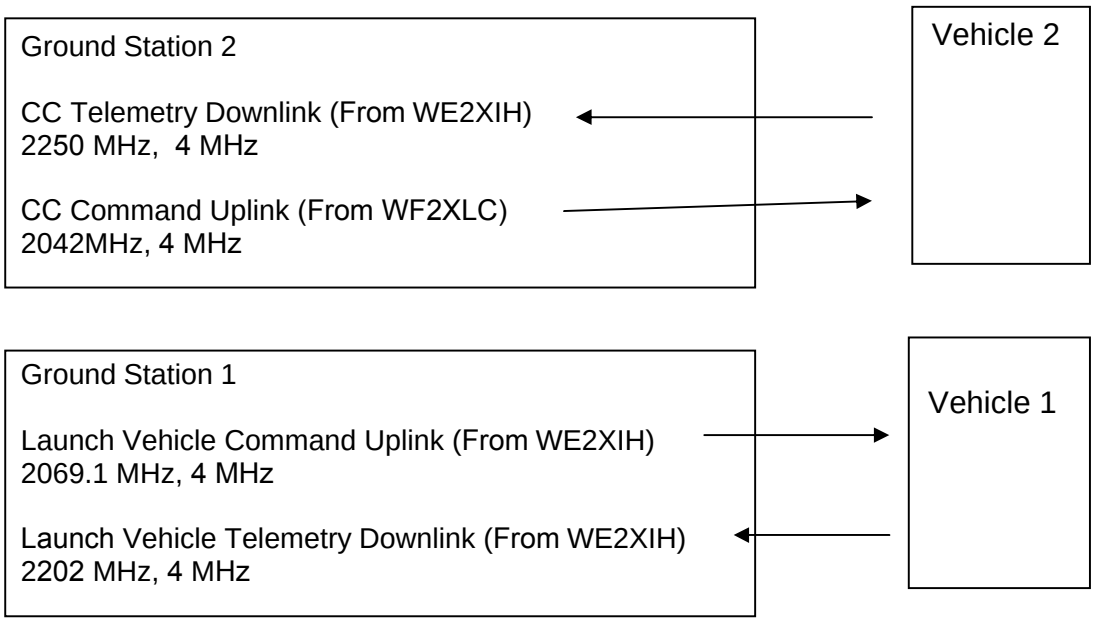
NOMINAL MISSION

The New Shepard system consists of two vehicles. The two vehicles are attached at launch, but separate during flight. The primary landing zone for one vehicle is a circular area with a radius two miles from the north landing pad (NLP). The other vehicle completes a post-separation trajectory and lands vertically at the NLP.

ADDITIONAL INFORMATION

The aerial vehicles take off and fly a vertical trajectory before returning to land. During the flight, the vehicle lateral position will vary from directly over the landing pad up to a 5-mile radius. In addition, the vehicle attitude will vary from pure vertical by approximately +/- 30 degrees and will vary around the vertical axis by approximately +/- 60 degrees. A GS (Ground Station) site will be used during flight testing. Blue Origin will experiment with the location of the GS antenna, within a 24 mile radius of the launch site in the Texas desert.

The vehicles employ real-time communications systems in order to provide telemetry to the launch operations team. Telemetry data is used to analyze the flight of the vehicle, while commands are used in order to control the flight sequence. In total, there will be four real-time S-Band links between the ground and the vehicles as shown in the following diagram:



The command uplink system is located at the launch site. The command uplink system has the following characteristics:

1. Ethernet source
2. Comtech DMD-20 modem that provides modulation with a 2 or 4 MHz bandwidth. See picture below
3. HD Communications RF Transmitter with a maximum of 12 Watts output
4. One tracking antenna with an 6 degree beamwidth and circular polarization
5. System Effective Isotropic Radiated Power (EIRP) 2200W

DESCRIPTION OF DIRECTIONAL ANTENNA OPERATION

The transmit signals for the vehicle 1 and 2 uplinks at 2069.1 and 2042 MHz are sent by 6-foot tracking parabolic dish antennas. At 2042 or 2069.1 MHz, the beamwidth of these antennas are six degrees. For a given flight, the antennas will be located within 24 miles of the launch pad, which is at 31 25' 22.99" N, 104 45' 26.01" W (see West Texas Launch below). The parabolic dish antennas will slew during the flight in order to track the current location of the two vehicles. Therefore, the orientation of the antenna throughout the flight of the vehicles will vary depending on the vehicle locations.

LENGTH OF TIME THAT WILL BE REQUIRED TO COMPLETE THE PROGRAM OF EXPERIMENTATION:

Blue Origin is developing a series of launch vehicles. Extensive flight testing is planned for multiple vehicles for more than a 5-year period (see #6, above). Blue Origin plans to use the telemetry equipment on multiple test vehicles over the course of a 5-year period following receipt of the license sought in this application.

West Texas Launch Site